

● PRINTER RUSH ●

(PTO ASSISTANCE)

Application : <u>09/996661</u>	Examiner : <u>TU</u>	GAU : <u>2133</u>
From: <u>CWC</u>	Location: <u>IDC</u> FMF FDC	Date: <u>12-6-05</u>

ATTN: Chief Drafts Person Tracking #: epm 09/996661 Week Date: 7-25-05

DOC CODE	DOC DATE	MISCELLANEOUS
<input type="checkbox"/> 1449	_____	<input type="checkbox"/> Continuing Data
<input type="checkbox"/> IDS	_____	<input type="checkbox"/> Foreign Priority
<input type="checkbox"/> CLM	_____	<input type="checkbox"/> Document Legibility
<input type="checkbox"/> IIFW	_____	<input type="checkbox"/> Fees
<input type="checkbox"/> SRFW	_____	<input type="checkbox"/> Other
<input checked="" type="checkbox"/> DRW	<u>11-29-01</u>	
<input type="checkbox"/> OATH	_____	
<input type="checkbox"/> 312	_____	
<input type="checkbox"/> SPEC	_____	

[RUSH] MESSAGE: _____

Drawings done on lined paper

Thank you

[XRUSH] RESPONSE: _____

New set corrects formality

Print as is

INITIALS: CBK

NOTE: This form will be included as part of the official USPTO record, with the Response document coded as XRUSH.
REV 10/04



FIG. 1

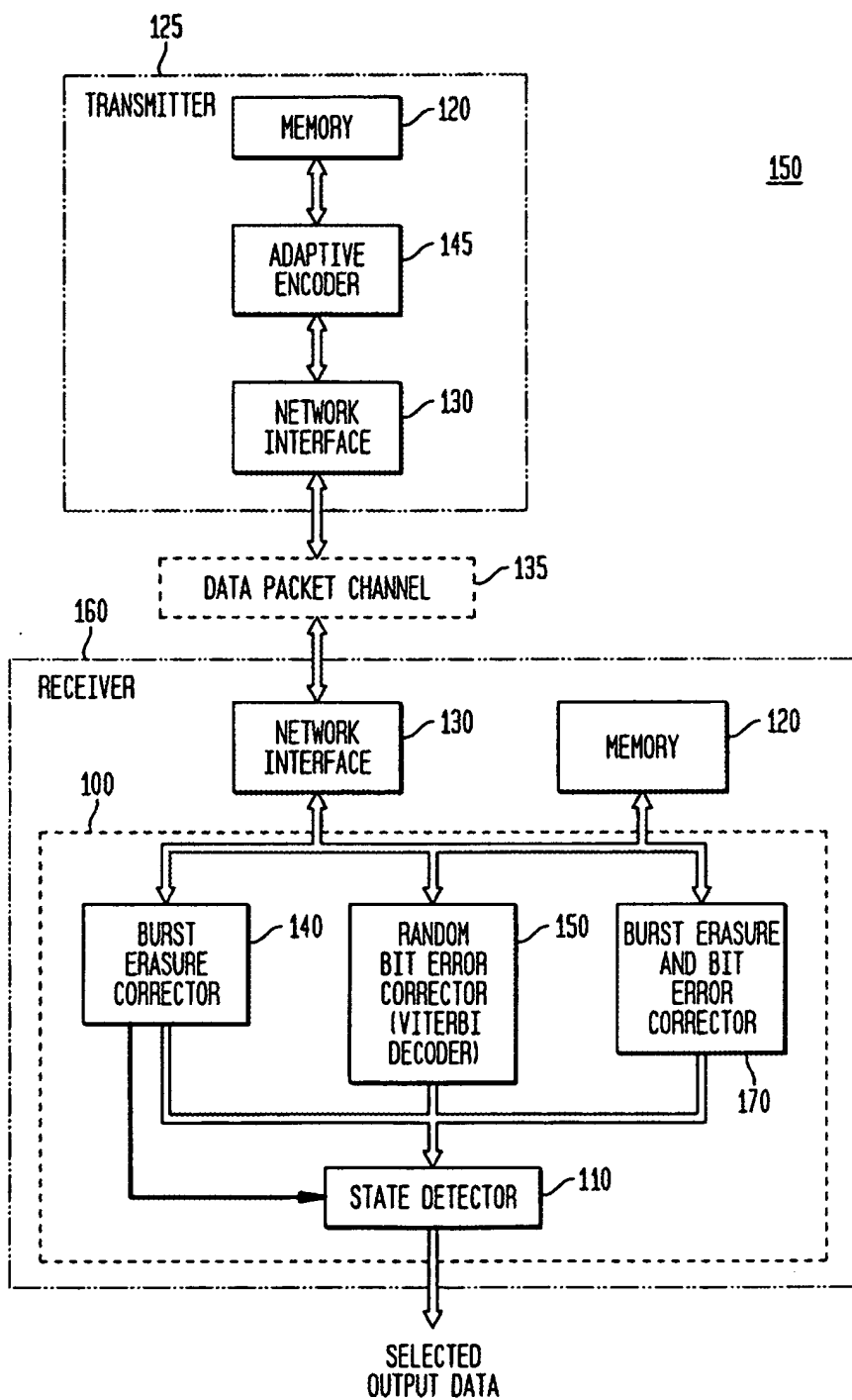


FIG. 2

$\tilde{y}[i]=$	$x[i]$	$x[i-3]$
$\tilde{y}[i+1]=$	$x[i+1]$	$x[i-2]$
$\tilde{y}[i+2]=$	$x[i+2]$	$x[i-1]$
$\tilde{y}[i+3]=$	$x[i+3]$	$x[i]$
$\tilde{y}[i+4]=$	$x[i+4]$	$x[i+1]$
$\tilde{y}[i+5]=$	$x[i+5]$	$x[i+2]$
$\tilde{y}[i+6]=$	$x[i+6]$	$x[i+3]$
$\tilde{y}[i+7]=$	$x[i+7]$	$x[i+4]$

FIG. 3

$\tilde{y}[0]=$	$x_0[0]$	$x_1[0]$	$x_2[0]$	0
$\tilde{y}[1]=$	$x_0[1]$	$x_1[1]$	$x_2[1]$	$x_0[0]$
$\tilde{y}[2]=$	$x_0[2]$	$x_1[2]$	$x_2[2]$	$x_0[1] \oplus x_1[0]$
$\tilde{y}[3]=$	$x_0[3]$	$x_1[3]$	$x_2[3]$	$x_0[2] \oplus x_1[1] \oplus x_2[0]$
$\tilde{y}[4]=$	$x_0[4]$	$x_1[4]$	$x_2[4]$	$x_0[3] \oplus x_1[2] \oplus x_2[1]$

FIG. 4

	$\tilde{y}[0]=$	$x_0[0]$	$x_1[0]$	$x_2[0]$	0
	$\tilde{y}[1]=$	$x_0[1]$	$x_1[1]$	$x_2[1]$	$x_0[0]$
	$\tilde{y}[2]=$	$x_0[2]$	$x_1[2]$	$x_2[2]$	$x_0[1] \oplus x_1[0]$
	$\tilde{y}[3]=$	$x_0[3]$	$x_1[3]$	$x_2[3]$	$x_0[2] \oplus x_1[1] \oplus x_2[0]$
SYMBOL ERASED \rightarrow	$\tilde{y}[4]=$	$x_0[4]$	$x_1[4]$	$x_2[4]$	$x_0[3] \oplus x_1[2] \oplus x_2[1]$
DECODE $x_0[4]$ HERE \rightarrow	$\tilde{y}[5]=$	$x_0[5]$	$x_1[5]$	$x_2[5]$	$x_0[4] \oplus x_1[3] \oplus x_2[2]$
DECODE $x_1[4]$ HERE \rightarrow	$\tilde{y}[6]=$	$x_0[6]$	$x_1[6]$	$x_2[6]$	$x_0[5] \oplus x_1[4] \oplus x_2[3]$
DECODE $x_2[4]$ HERE \rightarrow	$\tilde{y}[7]=$	$x_0[7]$	$x_1[7]$	$x_2[7]$	$x_0[6] \oplus x_1[5] \oplus x_2[4]$

FIG. 5

	$\tilde{y}[0]=$	$x_0[0]$	$x_1[0]$	$x_2[0]$	0
	$\tilde{y}[1]=$	$x_0[1]$	$x_1[1]$	$x_2[1]$	0
	$\tilde{y}[2]=$	$x_0[2]$	$x_1[2]$	$x_2[2]$	$x_0[0]$
	$\tilde{y}[3]=$	$x_0[3]$	$x_1[3]$	$x_2[3]$	$x_0[1]$
	$\tilde{y}[4]=$	$x_0[4]$	$x_1[4]$	$x_2[4]$	$x_0[2] \oplus x_1[0]$
	$\tilde{y}[5]=$	$x_0[5]$	$x_1[5]$	$x_2[5]$	$x_0[3] \oplus x_1[1]$
SYMBOL ERASED \rightarrow	$\tilde{y}[6]=$	$x_0[6]$	$x_1[6]$	$x_2[6]$	$x_0[4] \oplus x_1[2] \oplus x_2[0]$
SYMBOL ERASED \rightarrow	$\tilde{y}[7]=$	$x_0[7]$	$x_1[7]$	$x_2[7]$	$x_0[5] \oplus x_1[3] \oplus x_2[1]$
RECOVER $x_0[6]$ HERE \rightarrow	$\tilde{y}[8]=$	$x_0[8]$	$x_1[8]$	$x_2[8]$	$x_0[6] \oplus x_1[4] \oplus x_2[2]$
RECOVER $x_0[7]$ HERE \rightarrow	$\tilde{y}[9]=$	$x_0[9]$	$x_1[9]$	$x_2[9]$	$x_0[7] \oplus x_1[5] \oplus x_2[3]$
RECOVER $x_1[6]$ HERE \rightarrow	$\tilde{y}[10]=$	$x_0[10]$	$x_1[10]$	$x_2[10]$	$x_0[8] \oplus x_1[6] \oplus x_2[4]$
RECOVER $x_1[7]$ HERE \rightarrow	$\tilde{y}[11]=$	$x_0[11]$	$x_1[11]$	$x_2[11]$	$x_0[9] \oplus x_1[7] \oplus x_2[5]$
RECOVER $x_2[6]$ HERE \rightarrow	$\tilde{y}[12]=$	$x_0[12]$	$x_1[12]$	$x_2[12]$	$x_0[10] \oplus x_1[8] \oplus x_2[6]$
RECOVER $x_2[7]$ HERE \rightarrow	$\tilde{y}[13]=$	$x_0[13]$	$x_1[13]$	$x_2[13]$	$x_0[11] \oplus x_1[9] \oplus x_2[7]$

FIG. 6

	$\hat{y}[0] =$	$x_0[0]$	$x_1[0]$	$x_2[0]$	0
	$\hat{y}[1] =$	$x_0[1]$	$x_1[1]$	$x_2[1]$	$P(x_0[0], 0, 0, 0)$
	$\hat{y}[2] =$	$x_0[2]$	$x_1[2]$	$x_2[2]$	$P(x_0[1], x_0[0], 0, 0)$
SYMBOL ERASED \rightarrow	$\hat{y}[3] =$	$x_0[3]$	$x_1[3]$	$x_2[3]$	$P(x_0[2], x_0[1], x_1[0], x_2[0])$
SYMBOL ERASED \rightarrow	$\hat{y}[4] =$	$x_0[4]$	$x_1[4]$	$x_2[4]$	$P(x_0[3], x_0[2], x_1[1], x_2[1])$
RECOVER $x_0[3], x_0[4]$ HERE \rightarrow	$\hat{y}[5] =$	$x_0[5]$	$x_1[5]$	$x_2[5]$	$P(x_0[4], x_0[3], x_1[2], x_2[2])$
RECOVER $x_1[3], x_2[3]$ HERE \rightarrow	$\hat{y}[6] =$	$x_0[6]$	$x_1[6]$	$x_2[6]$	$P(x_0[5], x_0[4], x_1[3], x_2[3])$
RECOVER $x_1[4], x_2[4]$ HERE \rightarrow	$\hat{y}[7] =$	$x_0[7]$	$x_1[7]$	$x_2[7]$	$P(x_0[6], x_0[5], x_1[4], x_2[4])$

FIG. 7

$\hat{y}[i] =$	$x[i]$	$x[i-3] \oplus x[i-4] \oplus x[i-5]$
$\hat{y}[i+1] =$	$x[i+1]$	$x[i-2] \oplus x[i-3] \oplus x[i-4]$
$\hat{y}[i+2] =$	$x[i+2]$	$x[i-1] \oplus x[i-2] \oplus x[i-3]$
$\hat{y}[i+3] =$	$x[i+3]$	$x[i] \oplus x[i-1] \oplus x[i-2]$
$\hat{y}[i+4] =$	$x[i+4]$	$x[i+1] \oplus x[i] \oplus x[i-1]$
$\hat{y}[i+5] =$	$x[i+5]$	$x[i+2] \oplus x[i+1] \oplus x[i]$
$\hat{y}[i+6] =$	$x[i+6]$	$x[i+3] \oplus x[i+2] \oplus x[i+1]$
$\hat{y}[i+7] =$	$x[i+7]$	$x[i+4] \oplus x[i+3] \oplus x[i+2]$

FIG. 8

$$\begin{aligned}
 x[i-1] &= y_0[i-1] \\
 x[i] &= y_0[i] \\
 x[i+1] &= y_1[i+4] \oplus x[i] \oplus x[i-1] \\
 x[i+2] &= y_1[i+5] \oplus x[i+1] \oplus x[i] \\
 x[i+3] &= y_1[i+6] \oplus x[i+2] \oplus x[i+1]
 \end{aligned}$$

FIG. 9

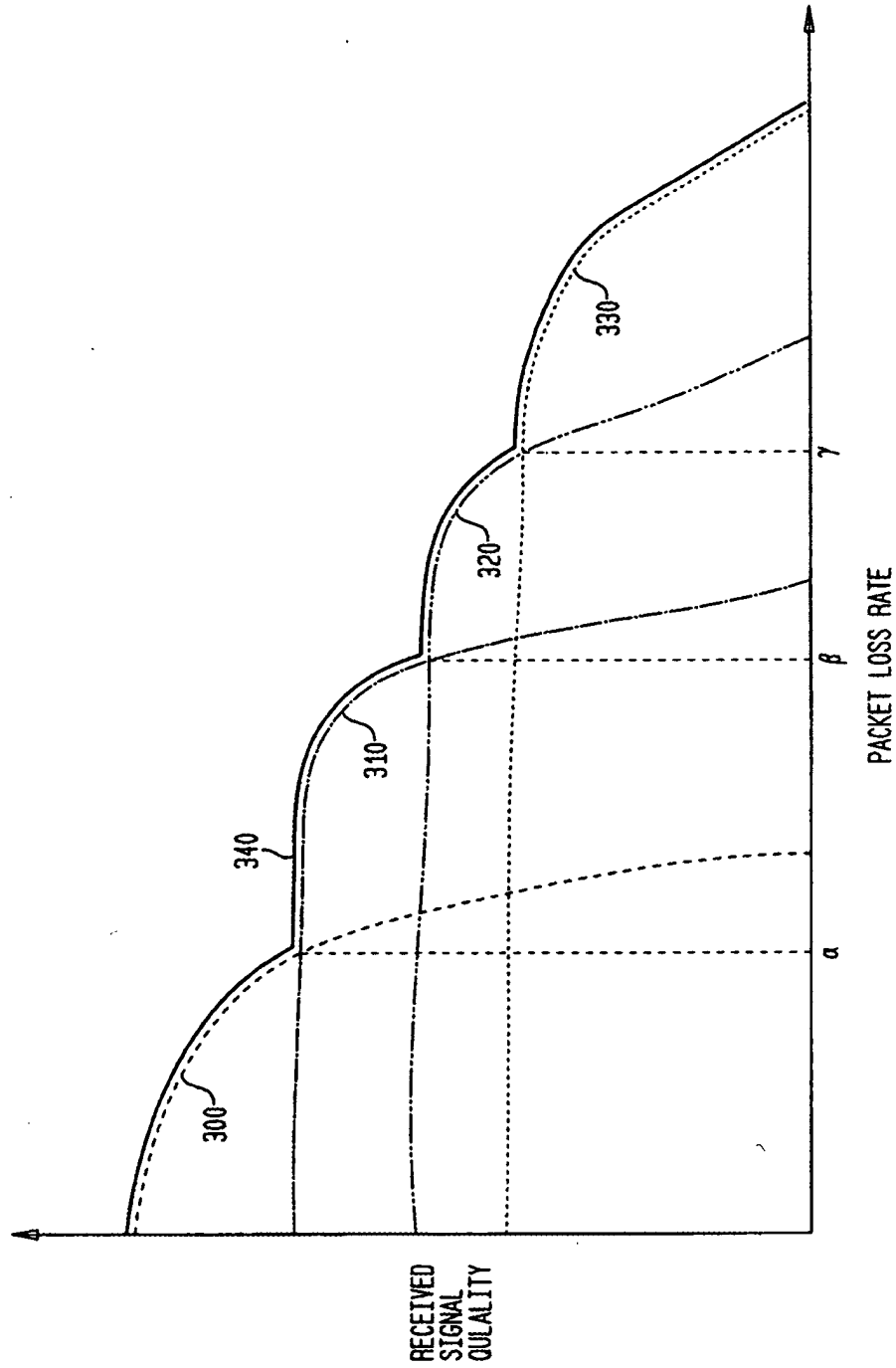


FIG. 10

